IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

§ § Yves Gattegno, et al. Confirmation No. 6443

\$ \$ \$ \$ \$ Serial No.: 10/593,262 Group Art Unit: 2128

Filed: Patel, Shambhavi K. September 18, 2006 Examiner:

§ METHOD FOR SOFTWARE Atty. Docket: For: 200800984-6

EMULATION OF A COMPUTER HPQB:0195

HARD DISK

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August 10, 2011 /Christopher R. Rogers/ Christopher R. Rogers, Reg. No. 59,664 Date

BRIEF IN REPLY TO EXAMINER'S **ANSWER DATED JUNE 23, 2011**

This Reply Brief is being filed in response to the Examiner's Answer dated June 23, 2011. As set forth below, the Appellants respectfully reiterate their request for the Board to review and reverse the Examiner's sole ground of rejection. In the previous Office Action, the Examiner rejected claims 1-46 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0200290 by Zimmerman, et al. (hereinafter "Zimmerman") in view of U.S. Patent No. 6,857,069 to Rissmeyer, et al. (hereinafter "Rissmeyer"). Claim 1 is independent.

Claim 1 recites, inter alia, "creating a representation of a real hard disk, wherein the seguence and location for loading and execution of components of the operating system of the data processing platform may be modified." (Emphasis added). In contrast, Rissmeyer discloses a fixed order of initially loading a network driver and then loading a disk driver. See Rissmeyer, col. 1, ll. 46-59. Rissmeyer does not disclose that

this predetermined sequence of loading of components may be modified. Therefore, Rissmeyer does not disclose that when creating a representation of a real hard disk, the order or sequence of loading and execution of components of an operating system changes or may be modified, as claimed. As pointed out by the Examiner, Rissmeyer explains that its boot sequence is different than the normal boot sequence, in that the network driver is loaded before the disk driver. *See* Rissmeyer, col. 3, ll. 3-14. Thus, Rissmeyer notes that "the traditional boot order of operating system such as Microsoft Windows must be changed." *See id.* The Examiner asserted that this disclosure is "sufficient to read on the claims, because the claim only requires a teaching of a one-time modification of the sequence . . . not a teaching that loading of the components be dynamically modifiable" in order to create the hard disk representation. *See* Examiner's Answer, pp. 15-16.

To the contrary, claim 1 provides a method where the needed sequence to emulate the hard disk may not be initially known or may become different. Indeed, the plain language of claim 1 requires that the sequence of components be modifiable to create the representation of the real hard disk. For example, claim 1 recites that the sequence "may be modified" (not "has been modified" as characterized incorrectly by the Examiner). The plain language also requires that the *location* may be modified and thus, as appreciated by the skilled artisan, the modifiable sequence may be in a dynamic relationship with the modifiable location of the components. Furthermore, the Specification provides additional support in explaining, for example, that "adjustments of the orders of loading and execution of certain of the operating system components" may be needed and that emulated hard disks of differing types may be created. See Application, p. 1, 11. 10-18; p. 4, 11. 23-25; p. 11, 1. 27 – p. 12, 1. 20; p. 13, 1. 12 – p. 14, 1. 6. The Appellants respectfully assert that the Examiner has imposed an unreasonable interpretation on claim 1. Rissmeyer does not disclose that the order or sequence of loading and execution of components may be modified, as claimed. Further, Zimmerman does not remedy this deficiency of Rissmeyer, nor did the Examiner allege so.

In addition, the Examiner relied on Zimmerman to teach that the "location for loading and execution of components of the operating system components . . . may be modified," as recited in claim 1. See Examiner's Answer, p. 4 (citing Zimmerman. paras. [0019] and [0058]). However, Zimmerman merely discloses that "the address of a server to boot from" is provided to a client 2 PC upon power-up of the client 2 PC (from hibernation). See Zimmerman, para. [0058]. Zimmerman does not disclose that the location for loading and execution of components of the operating system components may be modified. The Examiner disagreed and stated that "Zimmerman discloses that the address of the server that is to be booted from maybe be modified," and that "[t]his [is] equivalent to modifying the source location of the components." See Final Office Action, p. 2. However, Zimmerman discloses that "the address of the server to boot from" is reported and not that this location is modified. See Zimmerman, para. [0058]. In response, the Examiner asserted that in Zimmerman the address from which the components are to be loaded may be the address of the network server in one instance, and may be the address of a different server is a second instance. See Examiner's Answer, p. 4. Yet, Zimmerman gives no indication that whatever server is the default server may be modified. See Zimmerman, paras. [0021] and [0058]. The Examiner also noted that Zimmerman teaches that in a multi-server network, the client may disclose to the client devices which additional server contains downloading information. See Examiner's Answer, p. 4. However, the language in paragraph [0021] referred by the Examiner merely indicates that the first server 4 has a client module 36 that specifies which server is used as the default server, and does not indicate that the configured default server may be changed. See Zimmerman, para. [0021]. Zimmerman does not disclose that the *location* for loading and execution of components of the operating system components may be modified. Furthermore, Rissmeyer does not remedy this deficiency of Zimmerman, nor did the Examiner assert so.

Finally, claim 1 recites that the software emulation has "parameterizable management of requests for writing and reading data." In contrast, Zimmerman is directed to the simultaneous transfer of data between a network server and one or more

client devices, with no mention of parameterization. See Zimmerman, para. [0001]. The Examiner argued that content or data in a read request or write request is a parameter, and also that the Zimmerman technique of writing to the local cache is a location parameter. See Examiner's Answer, p. 18. However, the content or data being read or written is not parameterizable in any sense that is consistent with the present claims. Claim 1 recites a "parameterizable management of requests for writing and reading data" and is concerned with storage location and volatility, and is generic to the actual content of the request. See Application, p. 14, Il. 16-19 (explaining that "[t]he possibility exists on the level of said service of managing the written data in parameterizable form and of being able, in particular, to provide in a storage space, specific to the client station/virtual hard disk pair, storage space that is not the common storage space of all clients."); p. 8, ll. 12-13 (stating that "[t]he volatility or persistence of the storage space used for the storage of the written data is parameterizable when this would make sense."). Furthermore, Zimmerman teaches the opposite of a parameterizable storage location of for write requests, because Zimmerman requires that all write requests be written to the local cache. Rissmeyer does not remedy this deficiency of Zimmerman, nor did the Examiner assert so.

Dependent claims 2 and 41 generally recite that if the data support containing the data of the emulated hard disk does not provide for writing in real time or directly, such as if the data support is an optical CD-ROM disk, the written data are stored in a storage space different from the data support. In contrast, Zimmerman writes to the local cache first to avoid possible corruption of the server 4, and then writes from the local cache to the server 4. The Examiner stated that "this is sufficient to read on the claimed limitations. See Examiner's Answer, p. 19. However, Zimmerman gives no indication that the server 4 or local cache are unable to accept write requests, contrary to the claims. Rissmeyer does not remedy these deficiencies of Zimmerman, nor did the Examiner assert so.

Dependent claims 16 and 19 generally recite changing to a different storage space for read or write requests *during an operating session*. In contrast, while Zimmerman

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discloses a "multi-server network" (i.e., "one or more additional servers may be coupled

to the network and may communicate with the first server 4 and client PCs 2"),

Zimmerman does not disclose that a target server or storage may be changed (i.e., read or

write requests are redirected) during the same operating session. See Zimmerman, para.

[0021]; Fig. 1. The Examiner stated that an "operating session" is not defined in

Appellants' Specification, and also that Zimmerman discloses various storage spaces.

See Examiner's Answer, p. 20. Yet, the skilled artisan would plainly understand that

once an operating session is established in Zimmerman, the storage spaces for reading

and write requests is fixed, contrary to the claims. See Zimmerman, paras. [0019],

[0021], [0032], and [0069]. Moreover, Rissmeyer does not remedy these deficiencies of

Zimmerman, nor did the Examiner assert so.

Conclusion

The Appellants respectfully submit that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the

undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: August 10, 2011

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